

## Abstracts

A491

is also important when identifying appropriate therapeutic options for patients who have progressed on trastuzumab (TZ). This study explores UK treatment patterns for women with HER2 + MBC who progress while on TZ, and have been previously treated with an anthracycline and a taxane (A&T). **METHODS:** Case histories from 2815 women with MBC seen January 2006 to December 2007 were retrieved from the IMS Advanced Disease Analyzer database: 421 had received TZ in the metastatic setting. Changes in therapy were used as a proxy for disease progression; patients receiving TZ monotherapy within 28 days of ending a previous regimen were excluded from this definition to ensure that TZ use as a maintenance treatment was not inappropriately characterised as progression. Therapeutic regimens received post-progression were characterised for 98 patients who had progressed on TZ. Results were compared with a UK treatment survey completed by oncologists with a specialist interest in breast cancer (n = 92). **RESULTS:** Of the 98 patients that progressed on TZ, 54 (55.1%) continued receiving a TZ-containing regimen, most commonly in combination with capecitabine (n = 21; 21.4%) or vinorelbine (n = 20; 20.4%). Capecitabine monotherapy was also commonly used (n = 31; 31.6%). Re-challenge with a taxane was uncommon (n = 1; 1.0%). Major regimens received post-progression on TZ, as identified from case histories, agreed closely with results from the treatment survey. **CONCLUSIONS:** This study demonstrates that, despite the lack of a robust evidence base in this population, a high proportion of patients continue to receive a TZ-containing regimen post-progression. This highlights a clear need for evidence-based HER2 targeted therapy in a patient population where effective treatment options are limited.

## PCN98

#### RACIAL DIFFERENCES IN MEDICATION-RELATED HEALTH CARE COSTS AND SERVICE UTILIZATION IN HORMONE RECEPTOR POSITIVE PRIMARY BREAST CANCER PATIENTS

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**OBJECTIVES:** The objective of this study was to examine racial differences in total and prescription related health care costs and service utilization associated with adjuvant hormonal therapy in women with primary breast cancer. **METHODS:** This was a retrospective cohort study of Medicaid enrollees with hormone receptor positive breast cancer newly starting adjuvant hormonal therapy. The study used North Carolina Medicaid data, which was linked to the North Carolina Cancer Registry. The patients were followed for one year after commencing the index medication (tamoxifen or aromatase inhibitor) to collect the data on medication utilization, health care costs, hospitalization and emergency department (ED) visits. **RESULTS:** In this cohort of 609 women with primary breast cancer, mean total health care costs was \$14,513.31 (SD = \$15,233.17), which did not differ significantly across the racial groups [white = mean (SD) \$15,261.13 (\$16,225.15); black = mean (SD) \$13,580.61 (\$13,870.34); p > 0.05]. Overall mean prescription related costs were \$4612.18 (SD = \$3509.59) with white patients having a significantly higher costs [mean (SD) = \$5000.51 (\$3582.29)] as compared to black patients [mean (SD) = \$4127.85 (\$3360.83)] (p < 0.05). After controlling for select background variables, prescription related costs remained significantly higher in white patients [p < 0.05]; however total health care costs did not differ significantly across the racial groups [p > 0.05]. The likelihood of hospitalization was significantly lower by 33% in black patients as compared to white patients after controlling for select

background variables (p < 0.05). Black race was associated with a 3% increase in the likelihood of an ED visit; however the difference was statistically insignificant (p < 0.05). **CONCLUSIONS:** In this study white patients had lower non-prescription related costs as a result of lower service utilization. Higher medication compliance in white patients may drive prescription related costs upwards but may consequently reduce the total health care costs.

## PCN99

#### AVAILABILITY AND SPATIAL DISTRIBUTION OF ONCOLOGY SPECIFIC RESOURCES IN GREECE

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**OBJECTIVES:** Assess the geographical distribution of the nationally available resources for the diagnosis/treatment of patients with cancer in Greece, in order to identify disparities in available capacity between various geographic regions that impact on the equality of access to effective care. **METHODS:** Due to lack of a centralized cancer registry as well as a national hospital capacity database, there is no record of either cancer prevalence or hospital capacity to treat cancer per geographic region. In this light, a questionnaire-based survey was conducted to all public and private sector hospitals in Greece, in order to record their capacity to diagnose/treat cancer. Special emphasis was placed on the recording of oncology clinic beds and chemotherapy beds. Data were clustered according to geographical region (a total of 11 in Greece) and compared to the percentage of the population in the region, as calculated in the 2001 census. **RESULTS:** Major discrepancies were observed in the distribution of resources in favor of large urban areas. The majority of the nationally available oncology clinic beds and chemotherapy beds (61.6% and 56.4% respectively) is located in the district of Attica, an area where only 32.2% of the total Greek population resides. Excess clustering above population percentages is observed in 2 more districts (that include large urban centers, as well), whereas for 3 districts, mainly rural, accounting in total for 16.3% of the country population, no available beds were recorded. **CONCLUSIONS:** Clustering of oncology specific resources exceeds the spatial concentration pattern of health care services observed in Greece. Geographical misdistribution is a major contributor to access inequalities in health. Fair allocation of resources according to population distribution could contribute to achieving earlier access to effective health care, thus reducing the burden of the disease, lowering the cost for seeking adequate treatment for the household and ensuring equality in access.

## PCN100

#### CONSUMPTION AND ACCESS TO INNOVATIVE CANCER DRUGS IN SLOVAKIA

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**OBJECTIVES:** The Slovak health care system is funded on the principles of solidarity, non-profitability and plurality in a system of compulsory health insurance. Slovakia's GDP is currently 58% of the EU 15 GDP average, but is forecasted to reach 80% of the EU 15 GDP average by 2025. A person born in Slovakia in 2002 can expect to live 73.9 years on average. Leading disability causes as % of DALY in Slovakia (2002) in total DALYs for men with malignant neoplasms were 14.4% and for women 13.5%. **METHODS:** We have analysed the

access and uptake of novel oncology drugs in the Slovak republic over a 7 year period based on sales data provided by IMS Health. Slovakia has a national public oncology register, which collects incidence, mortality and stage of diagnosis on all cancer types. We linked the national cancer epidemiological data to the cancer drug list and to the sales for cancer drugs. We performed analysis of the possible effect of novel cancer drug introduction and consumption on cancer survival and mortality. **RESULTS:** Oncological disease mortality in Slovakia had an increasing trend on a long-term basis, from 1999–2000 the mortality has decreased. Incidence and prevalence (in accordance with the world trends) increases. According to IMS and OECD health data the market for L01 and L02 drugs was €53,593 000, this represents €10 per inhabitant. Expenditures in L01+L02 accounts for 8,9% of the Rx expenditures or 7,9% of Total Pharma Market. **CONCLUSIONS:** Patient access to new cancer drugs in Slovakia improved significantly in the last years. It is highly probable that the improving survival is related to the use of modern surgical and diagnostic methods, earlier diagnostics of oncological diseases and better availability of innovative drugs.

## PCN101

#### RELATIONSHIP BETWEEN HEALTH CARE SUPPLY AND MAMMOGRAPHY SCREENING?

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**OBJECTIVES:** Public health approaches for prevention are considered to be successful with climbs in the numbers of services rendered. However, more thorough evaluations are required to uncover the still unmet need that remains hidden and harder to reach. The objective of this study is to estimate the impact of physician supply, mammography facilities, and managed care penetration on use of mammography screening. **METHODS:** Retrospective self-reported cross-sectional data from Behavioral Risk Factor Surveillance System for years 2000, 2002, and 2004 along with county level supply variables from area resource file, were used in the analysis. The analysis was restricted to females between 40–69 years of age. We estimate a series of multivariate regression model to assess the effect of individual and contextual supply variables on mammography screening. We also use variation in the physician supply, managed care penetration at the county level over the 5-year period to estimate its impact on mammography screening using a fixed effect estimation approach. **RESULTS:** Women living in rural areas were less likely (Coefficient = -0.023, 95% CI = -0.031–0.014) to obtain a mammogram even after controlling for supply side variable. Among the supply side variables only managed care penetration significantly predicted mammography screening. In areas with higher managed care penetration, women were more likely to get screened. **CONCLUSIONS:** Insurance status was one of the major determinants of mammography screening for females residing in rural areas. Contextual supply variables had lesser impact on mammography screening compared to individual level characteristics.

## PCN102

#### THE BURDEN OF RENAL CELL CANCER: A RETROSPECTIVE LONGITUDINAL STUDY ON OCCURRENCE, OUTCOMES AND COST USING AN ADMINISTRATIVE CLAIMS DATABASE

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**OBJECTIVES:** To evaluate simultaneously frequency of occurrence, outcomes, and cost of care of renal cell carcinoma (RCC), in order to provide empiric evidence on the burden of RCC. **METHODS:** Retrospective, naturalistic longitudinal study based on claims of individuals enrolled in the Friuli Venezia Giulia (FVG) administrative database. Since 1980, all FVG inhabitants are registered in an administrative database which includes information on hospital admissions, outpatients care, pharmaceutical prescriptions and mortality. We selected residents of FVG who had a RCC first hospital admission (ICD9 code 189) during the period 2000–2004, and we followed them up until: June 30, 2005, death or transfers. Direct medical costs (hospitalizations, drugs, visits, diagnostics and laboratory exams) were quantified using prices or tariffs expressed in Euro 2005. The perspective of FVG Regional Health Service was adopted. Survival and costs analysis were performed considering the presence or the absence of metastases. **RESULTS:** We enrolled 1358 patients (63% male), the 18.8% representing a metastatic-stage, leading to a crude incidence of 23/100,000 person-years. During follow-up, 76% of the metastatic patients and 21% of the non metastatic patients died. The risk of death was significantly higher among metastatic stage patients with a median survival of about six months. The cost per patient related to the first year after diagnosis for subjects with and without metastases was €13,692 and 10,502 Euro, respectively, with a mean difference of 3,363 Euro after adjusting for age and sex. Total health care costs per-patient over the maximum of follow-up were €16,090 for the localized-stage group and €17,656 in the metastatic-stage group. **CONCLUSIONS:** Results from our study show that, due to the large number of hospitalizations and the high mortality, the epidemiologic and socioeconomic burden to the health care system and to the society of RCC is high.

## PCN103

#### HETEROGENEITY IN THE APPROACH TAKEN TO CONDUCTING CHART AUDITS IN AUSTRALIAN HOSPITALS

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**OBJECTIVES:** In order for a new pharmaceutical treatment to demonstrate cost-effectiveness, it is important to understand the current standard clinical management practices for the relevant patient population. In some therapeutic areas, this information can be readily gleaned from clinical practice guidelines, database analyses and clinical input. However, in more complex conditions, standard practices are undefined and vary markedly both within and between countries. In such circumstances, valuable information can be obtained by conducting a chart audit. We report on the different approaches and requirements for conducting chart audits in Australian hospitals. **METHODS:** In total, 79 potential investigators were invited to participate in two separate studies. Investigators were contacted up to four times to maximise response. 52 investigators responded and 12 agreed to participate. Two investigators agreed to participate in both studies. **RESULTS:** All sites